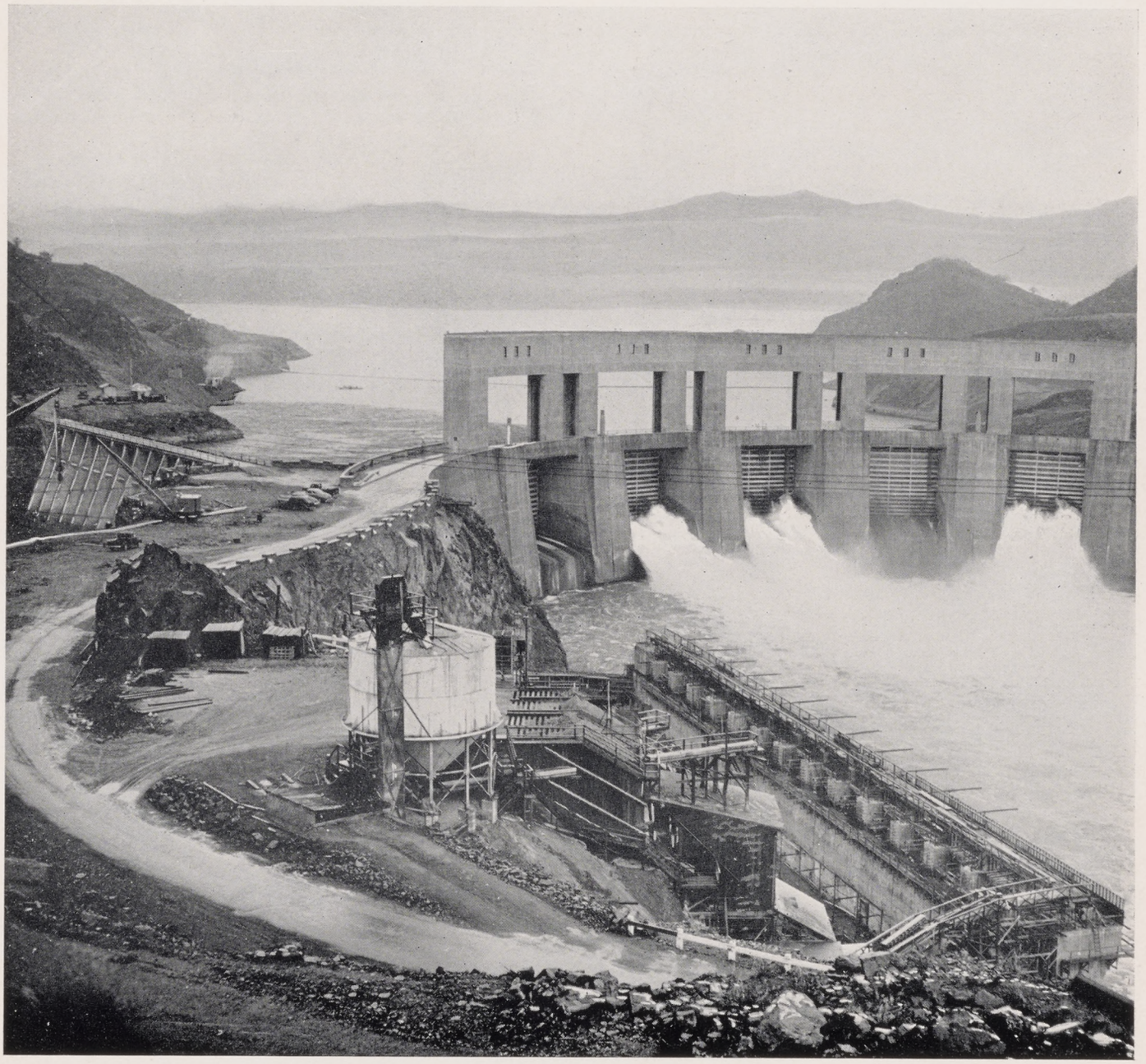
• COLORADO RIVER •

AQUEDUCT NEWS

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Vol. VIII. JANUARY 25, 1941 No. 1



This comprehensive photograph of Parker Dam Power Plant construction operations shows, at upper left, the forebay and trash rack above and adjacent to the dam, a portion of Lake Havasu back of Parker Dam, and, in the center foreground, construction operations in progress on the power plant. The power plant is scheduled to be completed in 1941.

• COLORADO RIVER •
AQUEDUCT NEWS
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
306 WEST THIRD ST.
LOS ANGELES, CALIFORNIA

Published monthly in the interest of Field and Office Workers on the Colorado River Aqueduct, and for the information of all other citizens of the Metropolitan Water District.

Vol. VIII. January 25, 1941 No. 1

Big Reduction In Aqueduct Cost

That the Colorado River Aqueduct, as contemplated under the bond issue, actually will cost about $22,000,000 less than was estimated when the bonds were voted in 1931 is disclosed in a report recently filed with the Board of Directors by General Manager Weymouth.

At the time the building of the giant water supply system was authorized by the voters of the thirteen District cities in 1931, a bond issue of $220,000,000 was voted to cover the estimated cost of the system. Actual cost of all features of the aqueduct contemplated under the original estimates will be approximately $198,000,000, or about $22,000,000 less than the bond issue cost estimate, it was set forth in Weymouth's report.

This marked lowering of the aqueduct cost has enabled the District to add to the system a modern softening and filtration plant at an initial cost of $3,750,000.

In addition to the $22,000,000 cost reduction of the aqueduct, as contemplated under the bond issue, the District now plans to defer certain investments on aqueduct features until later years. This will mean, General Manager Weymouth stated, that the amount which actually is to be expended to place the aqueduct system in operation this year, including the first cost of the softening and filtration plant, will be $191,000,000.

Certain parts of the aqueduct system have been financed from funds supplied from tax contributions and other sources than the aqueduct bond issue. This has resulted in a large block of aqueduct bonds remaining unsold in addition to those that are not being issued because of the greatly reduced cost of the water supply system. In fact, the Weymouth report states that after the present aqueduct construction program is completed there will remain on July 1, 1941, unsold aqueduct bonds in the amount of about $38,000,000.

Building of Parker Dam Power Plant Advanced to Meet Acute Need

To meet an urgent demand for additional electric power in the Phoenix and Tucson areas in Arizona, the United States Bureau of Reclamation is pushing forward toward completion the installation of three 40,000 horsepower hydroelectric generating units at Parker Dam on the Colorado River. The new power plant is located immediately below Parker Dam and on the California side of the river.

At the time Parker Dam was completed in 1938, it was not expected that the power plant would be built for some ten or fifteen years, or until the need for additional power by the Metropolitan Water District made its construction essential. However, in 1939, power users in the Salt River Valley and other sections of Arizona began to experience a need for electric energy far in excess of the amount available from local sources. To meet this shortage, the Federal Government set forward by more than a decade the time of building the Parker Dam plant.

Parker Dam was constructed by the Government with funds provided by the Metropolitan Water District. In consequence, the District has the right to half the power that may be generated at the dam, and accordingly has a direct interest in the building of the new power plant.

Furthermore, in order to provide Arizona power users with electric energy during the period the plant is under construction, contracts were entered into between the Government, the District, the Salt River Valley Water Users Association and others, by which the District has been delivering power over the aqueduct transmission line from Boulder Dam to Parker Dam. From this point the emergency supply is sent on to the Phoenix and Tucson territory over a recently constructed transmission line. The power being sold to the Arizona consumers is a part of the District's Boulder power allocation not now required by the District. The District is credited with these power sales. Upon the completion of the Parker Dam plant, energy from this source will take the place of the Boulder power, and the revenues derived from these sales will be used to repay the cost of the plant in which the District has a one-half interest.

The Government's one-half share of the power to be generated at Parker ultimately will be used for operation of pumps on the Gila project now under construction and on Indian lands. But for the next several years it is expected that all of the surplus power will be sold commercially in the vicinities of Phoenix, Tucson and Yuma.

Generation of hydroelectric energy at Parker Dam is made possible by reason of the 72-foot fall from Lake Havasu, back of the dam, to the river below the dam. Water from Lake Havasu will be diverted through a large trash-rack structure adjacent to the dam and into a forebay. From the forebay, the water will drop to the power plant through four penstock tunnels each 22 feet in diameter. In its initial development,

(*Continued on Page* 6.)

– DIRECTORY –

BOARD OF DIRECTORS

W. P. Whitsett, Chairman
Franklin Thomas, Vice-Chairman
S. H. Finley, Secretary
Anaheim.....E. P. Hapgood
Beverly Hills....Arthur Taylor
Burbank....James L. Norwood
Compton....Warren W. Butler
Fullerton..Walter Humphreys
Glendale.....Herman Nelson
Long Beach....William M. Cook
Los Angeles.....Otto J. Emme
Los Angeles....Perry H. Greer
Los Angeles.....Joseph Jensen
Los Angeles.....D. W. Pontius
Los Angeles.....John R. Richards
Los Angeles.....Victor H. Rossetti
Los Angeles.....W. P. Whitsett
Pasadena.....Franklin Thomas
San Marino....John H. Ramboz
Santa Ana.....S. H. Finley
Santa Monica.....Arthur P. Creel
Torrance.....Charles T. Rippy
J. M. Luney, Controller
Ira R. Pontius, Treasurer

GENERAL STAFF

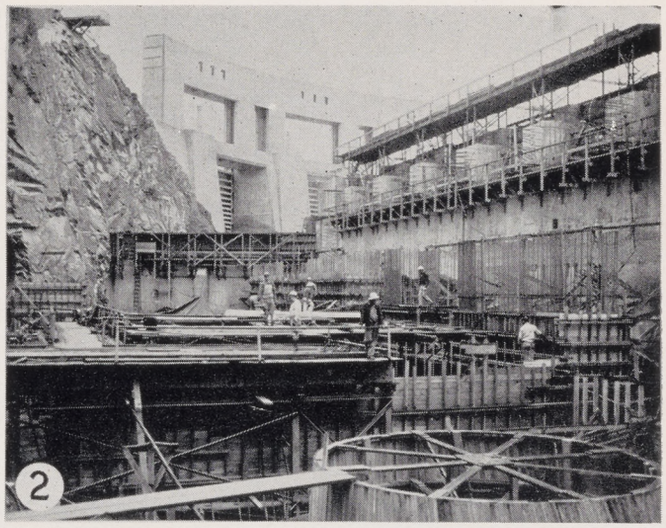
General Manager and Chief Engineer....F. E. Weymouth
Asst. Chief Engineer.....Julian Hinds
General Counsel .....James H. Howard
Asst. General Counsel.....Arthur A. Weber
Chief Elec. Engineer.....J. M. Gaylord
Asst. to Gen. Mgr.....Don J. Kinsey
Asst. Controller, G. D. Smith
Asst. Treasurer, C. G. Olson
Secy. to Gen. Mgr.....Elisabeth von Hagen

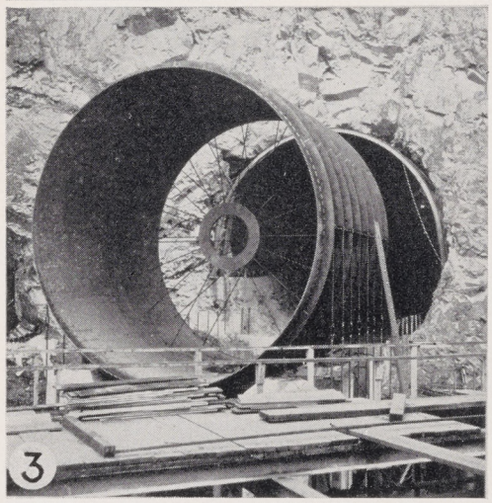
DIVISION ENGINEERS

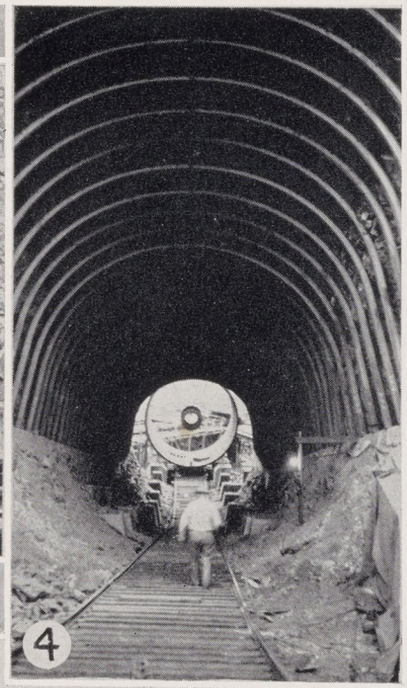
Distribution.....R. B. Diemer
Transmission....Robt. N. Allen
Maintenance.....W. J. Neale
Field. Supt. Pumping.....T. T. Walsh

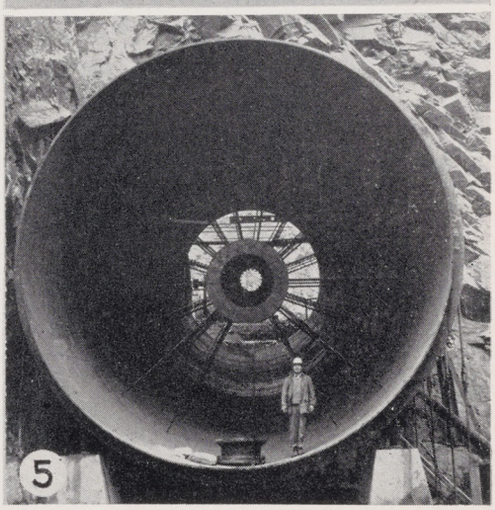
Aqueduct Contracts
Distribution System
Softening and Filtration Plant
Griffith Company. Weymouth Crowell Co., Project Manager, Olen Evans, Field Supt.
Waste Water Disposal Line
United Concrete Pipe Corporation
Schedule 29P
American Concrete & Steel Pipe Co.
Schedule 30SC
J. F. Shea Co., Inc.
Hollywood Tunnel
J. F. Shea Co., Inc.
Schedule 31P
United Concrete Pipe Corp.
Schedules 32CI, 33CI
Artukovich Bros.
Schedules 34P, 35P, 36P
American Concrete & Steel Pipe Co.
Schedule 37SC
Macco Construction Co.
Schedules 38SC, 39A
Werner & Webb
Schedule 40A
Warren Southwest, Inc.
Schedule 41P
American Concrete & Steel Pipe Co.
Orange County Reservoir
C. G. Willis & Sons, Inc., and Charles G. Willis.

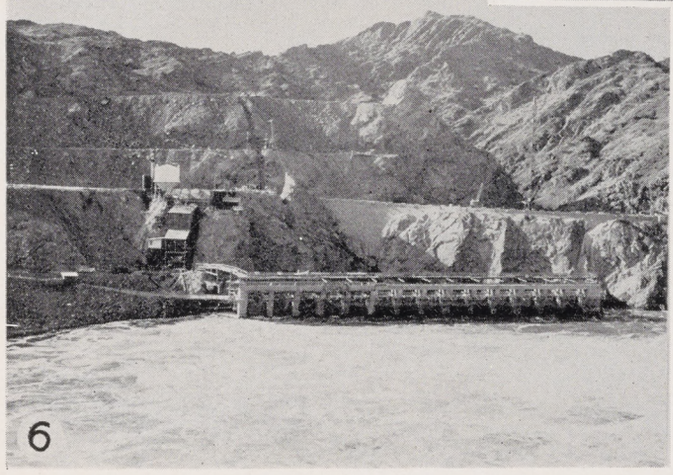


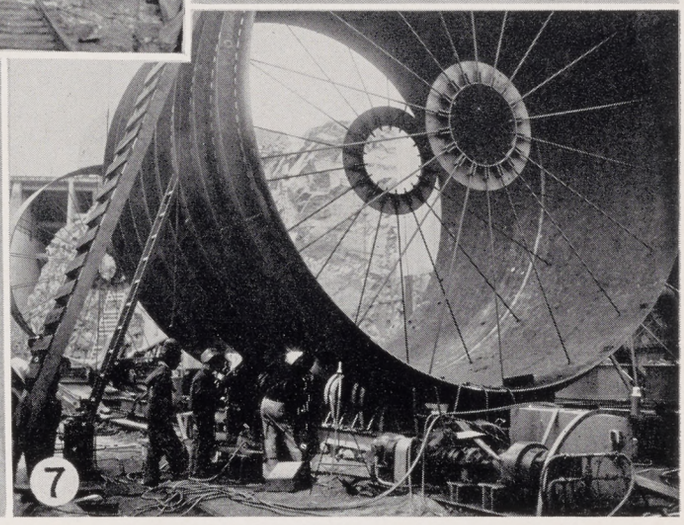












Close-up views of construction operations at the Parker Dam Power Plant. (1) Downstream view of tunnel portals adjacent to power plant, showing steel penstock sections being moved into place. (2) Concrete forms in power plant substructure, with a portion of Parker Dam in view. (3) A welded steel penstock section, 22 feet in diameter, being moved into the portal of one of the 4 penstock tunnels. (4) Looking down and out of a penstock tunnel. (5) A section of steel penstock lining. Note size of huge steel tube compared to workman standing inside. (6) A general view of the power plant site on the California side of the Colorado River. (7) Workmen engaged in fabricating a steel liner for one of the penstock tunnels.

MONTHLY REPORT REVIEWS ACTIVITIES ALONG THE AQUEDUCT LINE

(EDITOR'S NOTE: The following is a brief summary of some of the activities of the District as set forth in the monthly report of General Manager F. E. Weymouth, filed with the Board of Directors in January, covering work done in December).

Legal Division

Definitive refunding 3 per cent bonds in the amount of $12,096,000 were delivered in exchange for $12,096,000 of 3 per cent temporary refunding bonds.

Miscellaneous Activities Division

During the month of December, 1940, 237 labor employment applicants were cleared for work on the aqueduct. Of this number, 5 were made available for force account work and 232 were made available for aqueduct contractors. Identification certificates were issued to 134 applicants. The net turnover for all positions for November, 1940, was 1.93 per cent as compared with 1.00 per cent for the same month in 1939.

Main Aqueduct

Salvage Division—Stock appraised and transferred to the Banning salvage yard to date amounts to $2,364,530.12. Sales during December amounted to $13,601.22. Total of salvage disbursements to date amounts to $1,505,241.88. The appraised value of stock on hand as of December 31, 1940, amounted to $676,533.05.

Parker Dam and Power Plant—The Bureau of Reclamation forces completed the draft tube forms for power units 1 and 2, and the contractors completed the installation of pipe in penstock tunnel No. 1 and started installation of penstocks Nos. 2 and 3.

Electrical Engineering Division

Pumping Plants—The pumping plants were shut down during the month for general inspection and overhaul of equipment.

Miscellaneous—The hearings at Los Angeles on the new contracts necessary under the Boulder Canyon Project Adjustment Act were concluded on December 6.

Civil Engineering Division

Design—Contract plans for the Palos Verdes chlorination station were revised to conform with changes made since the specifications were issued, and design of the delivery connection to the Pasadena water system was completed.

Specifications—Five sets of specifications were completed and issued during the month, including specifications No. 350 for painting at the water softening plant and on which bids were opened on December 30, 1940.

Hydrography—The monthly meeting of the Colorado River Board of California was attended, where the water supply data and conclusions involved in the recent Boulder Dam power rate hearings were explained and many questions answered.

Distribution Division

Field and Office Engineering—Field surveys consisted of giving lines and grades and measuring quantities for construction work in progress. Office engineering involved checking shop drawings and making reinforcement steel lists for schedules of the Santa Monica and Orange County feeders. At the Mathews Memorial, a curb wall was built in front of the memorial to improve parking conditions, and additional pipe lines were installed for watering trees and plants.

Contract Work—At the softening and filtration plant, the contractor and subcontractors continued placing concrete, tile, and terrazzo; installing building hardware, doors, and windows; setting cast stone ornaments, putting in pressure and other pipe, and completed testing of the influent and effluent lines. On the Santa Monica feeder, the contractor has completed Schedule 29P, except the structure at San Rafael Tunnel, and on the Orange County feeder, the subcontractor was preparing to start excavation and laying of pipe on Schedule 34P. Laying of steel pipe in the Morris Reservoir connection is practically completed, and grouting in the tunnel section has been started.

Purchasing Division

The total expenditure covered by 314 purchase orders and 44 agreements issued by this division during the month of December, 1940, aggregated approximately $32,950.00. Carload forwardings totaled 52, of which 46 were cement.

Accounting and Costkeeping

The total cost of the work accomplished to December 31, 1940, was $188,623,341.35.

Press and Radio Tell of Aqueduct



Fox Case, Director of Public Relations, Pacific Coast Network, Columbia Broadcasting System.

Ever since the District, more than eight years ago, set under way the gigantic task of building the Colorado River Aqueduct, the press and the radio have kept people of Southern California and the country at large informed of the progress of this history-making work.

Step by step the big job has moved forward toward completion along a 300-mile construction front extending from the Colorado River to the shores of the Pacific Ocean. And in the columns of daily and weekly newspapers have appeared, year in and year out, up to the minute reports of the problems confronted and the advances made. At the same time, every major milestone passed by the Aqueduct builders has been vividly and accurately described to the radio listeners of America. Especially active and effective in this public service has been the Columbia Broadcasting System.

As Director of Public Relations for Columbia's West Coast Network, Fox Case has covered the Aqueduct project since the first work was started on the giant water supply system. In fact it was on the Aqueduct project that radio did much of its pioneering work in its now vitally important service of covering public affairs.

NEWS FROM FIELD AND OFFICE



B. C. (Mike) LEADBETTER

After eight years of brilliant service with the District, during which time he bossed the job of driving through to a successful completion the San Jacinto Tunnel, Mike Leadbetter, the one and only, turned in his resignation on January 6, and headed for Missouri to push through another big job.

His new job is that of General Superintendent of Construction on the building of the Leonard Wood Training Camp near Rolla, Missouri. He is with the K. N. W. L. Corporation.

For the past several months we have been hearing a lot about the dire need of speeding up the building of Army camps for a million new soldiers. Apparently someone in the Army and the general contracting field finally got wise, and sent for the man who has proved his ability to do jobs that "couldn't be done". They sent for Mike Leadbetter.

Mr. Leadbetter was one of the first engineers employed by the District when aqueduct construction work was launched in the latter part of December, 1932. Previously he had been engaged in mining operations in Nevada, South Africa, and South America, and in the contracting business in Los Angeles.

While with the District, he served as Division Engineer of Divisions 4, 5 and 6, and as the General Superintendent on the Coachella Tunnels and the San Jacinto Tunnel. His accomplishments in heading up the "impossible" job of driving through the San Jacinto Tunnel wrote new chapters in construction history.

AQUEDUCT TEMPERATURES
Dec. 15, 1940, to Jan. 15, 1941

	Max.	Min.
Gene Pumping Plant	71	36
Iron Mt. Pumping Plant	68	35
Eagle Mt. Pump. Plant	70	34
Banning	68	34
Lake Mathews	71	41

Kenneth McIsaacs visited the District's Los Angeles headquarters early this month and told of his experience during the past two years as General Superintendent of Construction for the J. G. White Corporation in Haiti. After a brief vacation in Southern California "Mac" returned to the Haitian republic to continue his work in directing the construction of roads, docks and warehouses.



Eagle Mountain Pumping Plant operating crew with one of the pumping plant motors as a photographic background. Standing, left to right, C. O. Thomason, Operator; L. A. Ledbetter, Caretaker; D. Gabele, Operator. On ladder, top to bottom, L. E. Carlisle, Maintenance Mechanic; Price Jones, Operator; Bill Richardson, Station Mechanic.



Rice, old shoes and orange blossoms! As everyone knows, the subject of the above photo is Miss Thelma Jones. But it isn't! It is Mrs. S. Kenny Odell. The wedding took place Friday evening, January 17, at the First Presbyterian Church in Upland. Mrs. Odell is now back at her desk in the Miscellaneous Activities Division.

Arthur E. (Bud) Graham resigned on January 1, as Inspector on the Distribution System, to accept a position with the Case Construction Co. in the Los Angeles Shipbuilding Yards in San Pedro. "Bud" had been with the District since 1931. His first job was as boat operator at Division 1 on the Colorado River. Later he served as Chainman, Levelman and Inspector.

* * *

Frederick (Fred) J. Doolittle is another old-timer who recently resigned from the District. He has left for the Panama Canal Zone to help Uncle Sam in his new defense program.

* * *

Mr. and Mrs. Joe Reider recently have been devoting much of their time at home to the training and care of James Alan Reider, born in Los Angeles on November 18. Mr. Reider's weight at birth was 8 pounds, 3 ounces. Father Reider is employed as a District patrolman on the aqueduct transmission line.

* * *

From its field correspondent the News has just received the flash that Ralph W. Zook, clerk at Division 2, is the father of a baby girl born November 24, and promptly thereafter named Barbara Ann.

Employees Credit Union Successful

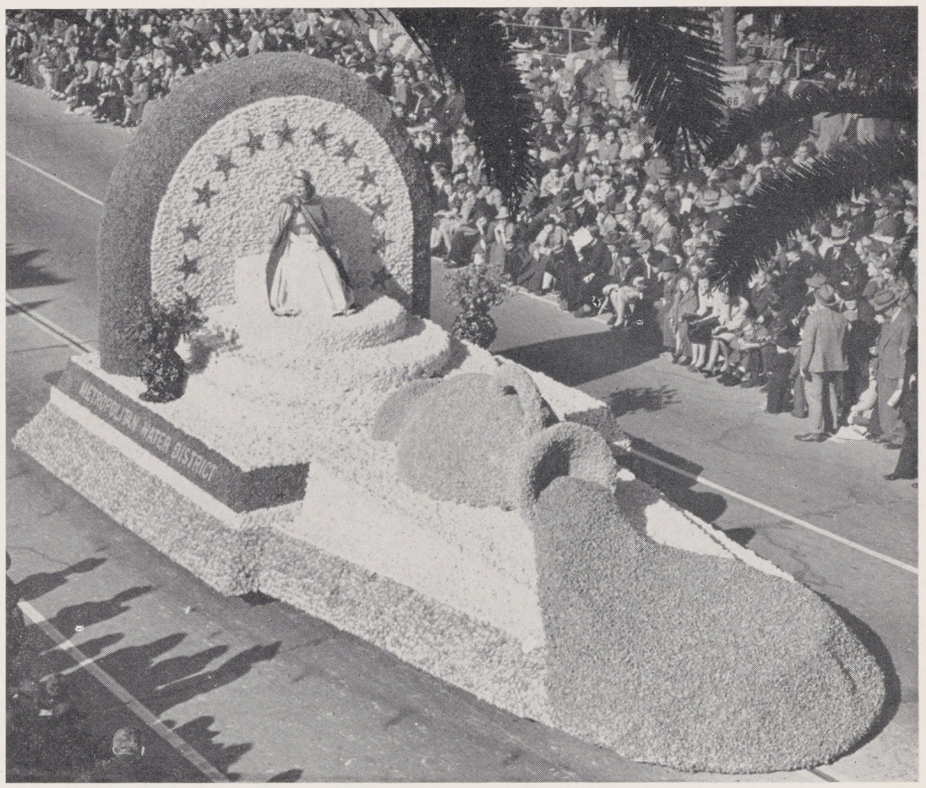
That the Metropolitan Water District Employees Federal Credit Union has completed another successful year in benefits to investors and borrowers alike is clearly shown in an audit report for the year 1940 recently received by C. G. Olson, General Manager and Treasurer.

At the close of 1940, the credit union's balance sheet disclosed, there were 23 loans aggregating $910.00 outstanding, and $767.52 cash in the bank. The income for the year from interest earned on loans amounted to $99.34, and returned a net profit of $75.46 which represented an earning of 6 per cent on the capital invested.

At the close of the past year, according to Mr. Olson, there were 56 investing members in the union. Any employee of the District is qualified to buy shares in the union, the value of each share being $5.00. Only members of the union are qualified as borrowers.

Since its organization in September, 1937, the credit union has made 171 loans, totaling $8,364.00, the average loan amounting to $48.00.

Members of the Credit Union Board of Directors are General Manager and Treasurer Olson; Ruth Thiers, Secretary; Ben Sciarra, Vice President, and James Marvin.



District float in 1941 Pasadena Tournament of Roses Parade

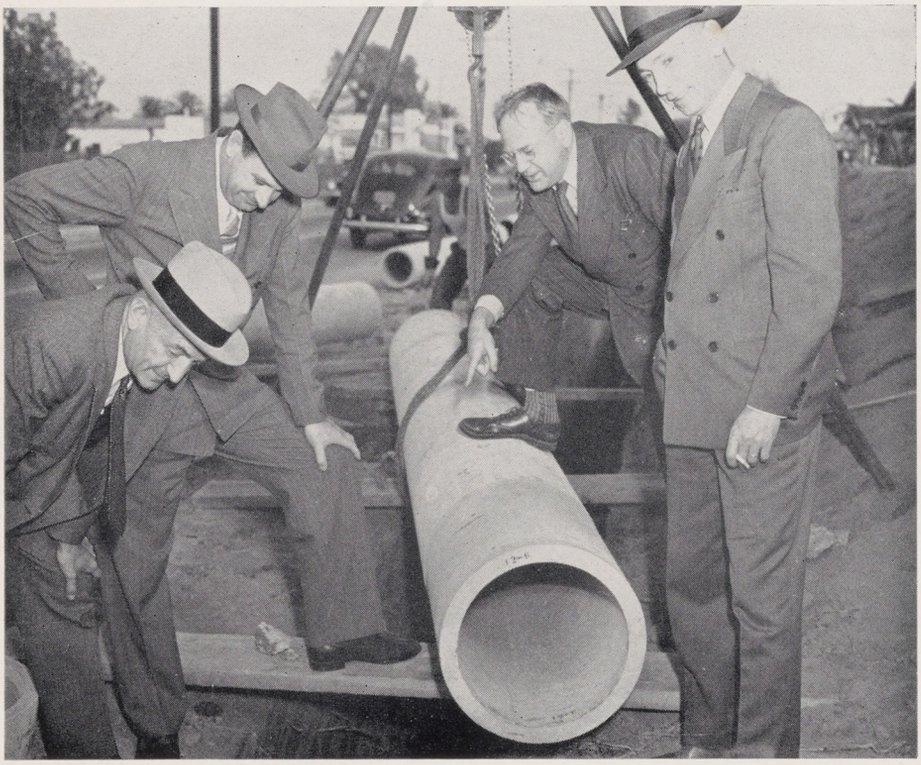
Water Float Wins Prize In Parade

First prize in the class of public utilities was won by the float entered in the 1941 New Year's Day Pasadena Tournament of Roses Parade by The Metropolitan Water District of Southern California.

Thirty-two feet long, and rising to a height of 14 feet, the District's float told in floral symbolism the story of thirteen cities of Southwest America which have conquered Drought and the Desert through the building of the giant Colorado River Aqueduct.

The thirteen cities of the Metropolitan Water District were represented by thirteen stars of blue cornflowers on a wide semi-circular back drop of white pom-poms. Below the stars of the thirteen cities was enthroned the queen of the Water District, Miss Eleanor Thomas, wearing a golden robe and a crown of thirteen golden stars. Miss Thomas is the daughter of Director Franklin Thomas of Pasadena.

Sweeping out before the throne was a field of white pom-poms which framed a huge olla made of golden baby chrysanthemums. Out of the mouth of the floral olla gushed a stream of water represented by blue delphiniums.



(Left to right) Carl Buratti and C. H. Van Norman, sales engineers for Johns-Manville Sales Corporation; D. B. Gumensky, District engineer, and J. H. Peterson, West Coast Manager for Johns-Manville, inspecting a section of 16-inch Transite pipe as it was being installed on the Compton lateral extension.